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Secretary for
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**California Regional Water Quality Control Board
North Coast Region
John W. Corbett, Chairman**

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Arnold
Schwarzenegger
Governor

December 17, 2007

In the Matter of
Water Quality Certification

for the

**CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION,
CASPAR CREEK FISH LADDER CONSTRUCTION PROJECT
WDID NO. 1B07164WNME**

APPLICANT: California Department of Forestry and Fire Protection
RECEIVING WATER: North and South Forks of Caspar Creek, within the Big River
HSA Sub Area No. 113.23
HYDROLOGIC AREA: Mendocino Coast Hydrologic Area No. 113.00
COUNTY: Mendocino County
FILE NAME: Caspar Creek Fish Ladder Construction Project

BY THE EXECUTIVE OFFICER:

1. On November 19, 2007, California Department of Forestry and Fire Protection (Applicant), filed an application for water quality certification under section 401 of the Clean Water Act (33 U.S.C. § 1341) with the California Regional Water Quality Control Board, North Coast Region (Regional Water Board) for activities associated with the Caspar Creek Fish Ladder Construction Project (Project). A fee in the amount of \$500.00 was received on October 30, 2007. The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on November 19, 2007, and posted information describing the Project on the Regional Water Board's website. No comments were received.

The proposed Project is located approximately 4 miles east of the town of Caspar, in the Jackson Demonstration State Forest (JDSF), Mendocino County, California. The latitude and longitude is 39.34243°N and -123.75392°W. The purpose of the project is to restore upstream fish passage by replacing two existing deteriorated wooden fish ladders with concrete structures and to remove accumulated sediment from two ponds. Both the fish ladders and weir dam/ponds are part of a long-term cooperative forestry study in the Caspar watershed conducted by the US Forestry Service (USFS) and the California Department of Forestry (CDF) since 1962.

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2. The proposed project is divided into two subprojects. Subproject 1 is the construction of two fish ladders at two sites. The project will restore upstream fish passage in the South and North Forks of Caspar Creek by replacing the existing ladders. Fish ladder construction shall occur as follows: installation of fish screens, coffer dam construction, dewatering and fish rescue and relocation, demolish and remove wooden fish ladders, perform instream channel grading work upstream and downstream of fish ladder location, begin excavation for and construct fish ladder and spillway, modify flow measurement weir, add structural backfill, final grading, demobilization and final cleanup. Final design plans for the fish passage have been approved by the National Marine Fisheries Service (NMFS). NMFS may prescribe follow-up studies or project retrofits as needed.

Subproject 2 is the recurring sediment removal behind two weir dams located immediately upstream of both fish ladders. Cleaning the weir pond entails capturing and relocating fish in the ponds, bypassing the creek flow around the pond, draining the water in the stilling pond, removing the sediment from the pond bottom, transporting and dumping the sediment, then restoring the creek flow to the pond site while maintaining some flow to the creek below the weirs. Pond cleanouts occur once every five years or less, depending on the bedload each pond receives. Approximately 300 cubic yards from each pond will be excavated using heavy equipment and trucked to the pre-approved upland dead-end spur road in JDSF. All fish or other significant aquatic species (such as tadpoles, frogs, and turtles) in the dewatered portion of the stream will be collected by a qualified biologist and relocated downstream of the work area. All fish collection and relocation will be performed in compliance with NMFS established guidelines.

The project requires pond dewatering and sediment capture. Creek discharge will be diverted through an existing 8 inch smooth walled pipe-line around the weir pond. The weir pond will then be gradually drained. In an effort to minimize increases in turbidity, a majority of the water will be siphoned from high in the water column and over the weir. The pipe inlet shall be screened. In addition, two settling pools will be utilized downstream of the dam to trap suspended sediments. One of these settling pools will be the existing after-bay created by the existing fish ladder. A second settling pool will be created below the fish ladder by constructing a mini-dam using weed-free straw hay bales or rice bales, plastic sheeting and clean washed gravel. This mini-dam will be removed after project completion. Water that comes in contact with wet concrete and has a pH greater than 9.0 must not be allowed to enter the ground or stream but may be pumped to a separate, lined basin constructed in the gravel bar, and then pumped to a truck or approved upland location for disposal or treatment.

3. This project is designed to be self mitigating as the ladder replacement will improve listed species fish passage and reduce the potential for a storm-related failure and subsequent sediment delivery. The pond cleanouts benefit Waters of the State by

preventing sediment from entering the two sub-watersheds. Rock Slope Protection (rip-rap) will be used to the minimum feasible. Pruning of vegetation will be done by hand crews and kept to the minimum necessary to allow equipment and crews to operate and avoid breakage of trees. A compliance report to the Department of Fish and Game (DFG) will be completed by The California Department of Forestry and Fire Protection (CALFIRE) after every pond cleanout and the fish ladder construction. A post project inspection (within 60 days) and a biological and hydrological evaluation of the new fish ladder performance will be completed annually for two years by CALFIRE and/or the US Forest Service research staff for NOAA Fisheries.

4. At a minimum, the following construction Best Management Practices (BMPs) will be incorporated into the final Project plans in order to reduce and control soil erosion: work in and around waterways will be conducted during the summer base flow period between June 15 and October 15. Installation of construction barrier fencing to preclude equipment entry into sensitive areas; installation of silt fencing or fiber rolls to prevent sediment loss from immediate work area; topsoil salvage and reapplication; seeding and mulching; and application of erosion control fabric as necessary. All required BMPs shall be on-site and ready for timely deployment, before start of construction activities. BMPs shall be installed following the **manufacturers' specifications** for preparation, **installation**, and maintenance of these products. Qualified personnel shall inspect the construction site at least every fourteen calendar days and within 24 hours of the end of a rainfall event that is 0.5-inch or greater.
5. On November 30, 2007, the Applicant adopted a mitigated negative declaration (State Clearinghouse number 2007092066) for the Project in order to comply with the California Environmental Quality Act (CEQA). The Regional Water Board has considered the environmental document and any proposed changes incorporated into the Project or required as a condition of approval to avoid significant effects to the environment.
6. The applicant has applied for a California Department of Fish and Game 1600 Streambed Alteration Agreement, 2006, and an Incidental Take Permit, 2006, File Number 2081-2006-028-3.
7. Applicant has applied for a United States Army Corps of Engineers Nationwide Permit 3 and 5 (Non reporting).
8. Applicant has received a NOAA Fisheries Biological Opinion May 6, 2003 and December 16, 2006, File Number 151422SWR2002SR6251:JTJ.

Receiving Water: North and South Forks of Caspar Creek within the Big River Sub Area No. 113.30, Mendocino Coast Hydrologic Area No. 113.00.

Filled or Excavated Area: 0.88 acres of permanent impacts to waters of the United States/State.

Latitude/Longitude: 39.34243° north, -123.75392° west

Expiration: October 15, 2012

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE REGIONAL WATER BOARD CERTIFIES THAT THE CASPAR CREEK FISH LADDER CONSTRUCTION PROJECT (FACILITY NO. 1B07164WNME), as described in the application will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided the Applicant complies with the following terms and conditions:

1. This Order is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.
2. This Order is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This Order is conditioned upon total payment of any fee required under chapter 28, title 23, California Code of Regulations, and owed by the Applicant.
4. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification", which requires compliance with all conditions of this certification (Enclosed).
5. Applicant shall construct the Project in accordance with the conditions described in the application and the findings above, and shall comply with all applicable water quality standards.
6. The Applicant shall provide Regional Water Board staff access to the Project site to document compliance with this Order.

7. Any change to the operation of the Project that would have a significant or material effect on the findings, conclusions, or conditions of this Order shall be submitted to the Executive Officer of the Regional Water Board for prior review and written approval.
8. Applicant shall provide a copy of this Order and attachments to the contractor and all subcontractors conducting the work, and require that copies remain in their possession at the work site. The Applicant shall be responsible for work conducted by its contractor or subcontractors.
9. All conditions required by this Order shall be included in the Plans and Specifications prepared by the Applicant for the contractor. In addition, the Applicant shall require compliance with all conditions included in this Order in the bid contract for this Project.
10. All mitigation activities shall be completed as proposed in the application.
11. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order. In response to a suspected violation of any condition of this Order, the Regional Water Board may require the holder of any federal or state permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the Regional Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the Regional Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.
12. The Regional Water Board may add to or modify the conditions of this Order, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
13. This Order is not transferable. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the existence of this Order by letter and shall forward a copy of the letter to the Regional Water Board. The successor-in-interest must send to the Regional Water Board Executive Office a written request for transfer of

this certification to discharge dredged or fill material under this Order. The request must contain the following:

- a. requesting entity's full legal name
 - b. the state of incorporation, if a corporation
 - c. address and phone number of contact person
 - d. description of any changes to the Project or confirmation that the successor-in-interest intends to implement the Project as described in this Order.
14. Except as may be modified by any preceding conditions, all Orders are contingent on: a) the discharge being limited and all proposed mitigation being completed in strict compliance with the Applicant's Project description, and b) compliance with all applicable requirements of the Water Quality Control Plan for the North Coast Basin (Basin Plan).
 15. The authorization of this Order for any dredge and fill activities expires on October 15, 2012. Conditions and monitoring requirements outlined in this Order are not subject to the expiration date outlined above, and remain in full effect and are enforceable.
 16. If construction dewatering is found to be necessary, the Applicant shall use a method of water disposal other than disposal to surface waters (such as land disposal) or the Applicant shall apply for coverage under the General Construction Dewatering Permit and receive notification of coverage prior to discharge to surface waters.
 17. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this Order, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State.
 18. When operations are complete, any excess material or debris shall be removed from the work area and disposed of properly.
 19. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be outside of waters of the State and United States. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall not result in a discharge or a threatened discharge to any waters of the State or the United States. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality.
 20. BMPs for erosion, sediment and turbidity control shall be implemented and in place at commencement of, during and after any ground clearing activities, construction

activities, or any other project activities that could result in erosion or sediment discharges to surface water.

21. If, at any time, an unauthorized discharge to surface water (including wetlands, rivers or streams) occurs, or any water quality problem arises, the associated project activities shall cease immediately until adequate BMPs are implemented. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.

Please contact Stephen Bargsten of our staff at (707) 576-2653 if you have any questions or need to report any violation of this Order.

Robert R. Klamt
Interim Executive Officer

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Enclosure: State Water Resources Control Board Order No. 2003-0017-DWQ

Original sent to: California Department of Forestry and Fire Protection, 802 North Main Street, Fort Bragg, CA 95437

Copies sent to: Mr. Bill Orme, SWRCB, 401 Program Manager, Clean Water Act Section 401 Certification and Wetlands Unit Program

Ms. Kim Niemeyer, SWRCB, Office of the Chief Counsel

Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 1455 Market Street, San Francisco, CA 94103-1398

Mr. Dan Wilson, California Department of Fish and Game, P.O. Box 47, Yountville, CA 94599

Mr. Dan Logan, National Marine Fisheries Service, 777 Sonoma Avenue, Suite 325, Santa Rosa, CA 95404